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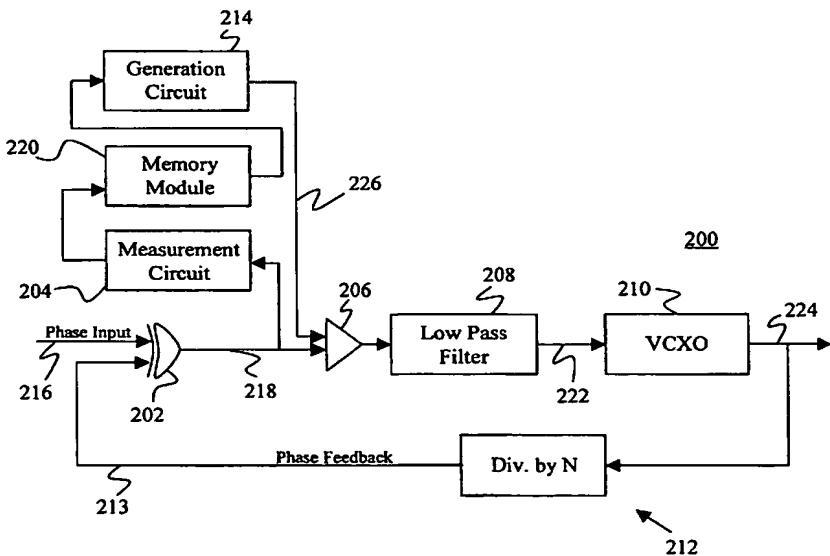
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(54) Title: SYSTEM AND METHOD FOR MAINTAINING AN ACCURATE FREQUENCY ON A VOLTAGE CONTROLLED OSCILLATOR



(57) Abstract: A method for phase-locking a voltage controlled oscillator (210) is disclosed. The method comprises receiving, at a phase detector (202), a phase input signal (216) and a phase feedback signal (213) from the voltage controlled oscillator (210); measuring (204) a pulse width property of an error signal (218) output from the phase detector (202) to obtain a pulse width property measurement; storing the pulse width property measurement in a memory (220); and generating (214) a new signal (226) from the stored pulse width property measurement to phase-lock the voltage controlled oscillator (210). The method of the present invention may be used to calibrate a clock, in clock holdover and in qualification of clock sources.

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- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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## A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 331/1A, 14, 17, 18, 25, DIG 2; 327/156-159; 332/127; 360/51; 375/376; 455/260

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3,883,817 A (CLIFF) 13 MAY 1975 (13/05/1975), SEE THE ABSTRACT.	ALL

 Further documents are listed in the continuation of Box C.

See patent family annex.

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